

Boeing Company\_Comments

From: Pinkowski, Stan [stan.pinkowski@boeing.com]  
Sent: Monday, January 28, 2002 1:10 PM  
To: 'tara.dunn@dgs.ca.gov'  
Subject: Energy Resource Investment Plan - Comments From The Boeing Company

As requested by the CPA in soliciting public input, The Boeing Company respectfully submits its comments on the working draft of the Energy Resource Investment Plan as cited on  
<http://www.capowerauthority.ca.gov/EnergyResourceInvestmentPlan/main.asp> .

Pg 13. Under the Distributed Generation paragraph, please add: "solar thermal electric systems," ...

Pg. 28. Under the Greening the Peak - Renewable Peakers paragraph, please add: "Furthermore, solar power towers and parabolic trough peaker plants using molten salt for solar thermal storage can also satisfy these criteria without relying on combustion to deliver power within 10 minutes of a request."

PG 13

Distributed Generation

Distributed Generation (DG) is electrical generation, with or without combined thermal energy capture, which is located at the site of end users. Although DG technically can include generation located at utility substations, we are interested in DG more specifically as it functions on the "customer side" of the meter. DG encompasses a range of technological possibilities:

- \* Conventional engines and turbines have a relatively low first cost and may be attractive to businesses or critical institutions wanting a reliable, on-site primary or back-up power supply,
- \* Technologies with higher overall efficiencies such as combined heat and power systems that use a conventional generator (engine, micro turbine, or fuel cell) to generate electricity and also apply the waste heat for on-site thermal requirements, such as process steam, space or water heating, or

- \* On-site renewable energy sources such as ground-source heat pumps, solar photovoltaic (PV) panels, solar thermal electric systems, small wind turbines, or fuel cells that use hydrogen or potentially other renewable fuels that chemically produce electricity.

Pg 28

- \* Renewable Peakers. Early in its program activities the Authority solicited proposals for developing new renewable generation projects. Among the projects submitted were a few that are both 100% renewable and operate with all of the characteristics of a peaking power plant. Traditionally, renewable power plants have been unable to provide power for the entire peak period (fueled solely by a renewable source), or deliver the power within 10 minutes of a request. However, peaker projects designed to operate on biofuel or biogas, both of which are either manufactured or stored on site, can satisfy these criteria. Furthermore, solar power towers and parabolic trough peaker plants using molten salt for solar thermal storage can also satisfy these criteria without relying on combustion to deliver power within 10 minutes of a request. The CPA believes that at least 100 megawatts of renewable peaking capacity can be developed during 2002, and is signing LOIs with project developers to achieve this goal.

For further information from the Dept of Energy's EREN that substantiates the recommended input, please refer to:

Boeing Company\_Comments

<http://www.eren.doe.gov/csp/>

Distributed Power: <http://www.energylan.sandia.gov/sunlab/distributed.htm>

Dispatchable Power: <http://www.energylan.sandia.gov/sunlab/dispatchable.htm>

If you have any questions, please feel free to call me.

Thank you kindly,

Stan Pinkowski  
Business Development Manager  
Power and Energy Systems  
Boeing Rocketdyne  
Phone: (818) 586-3829